

PETTIPIECE et al.  
Application No.: 09/536,932  
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**PATENT**

9 at least two turning mirrors; and  
10 one polarizing beam splitter,  
11 wherein said polarizing beam splitter preferentially reflects a first polarization and  
12 preferentially transmits a second polarization;  
13 a detector array, wherein said sample and said interferogram of said sample are imaged on  
14 said detector array, wherein said detector array outputs a plurality of signals corresponding to an intensity at  
15 each pixel of said array; and  
16 a processor coupled to said detector array and coupled to a monitor, said processor displaying  
17 an image of said sample on said monitor.

1                   13. The spectral imaging system of claim 12, wherein said polarizing beam splitter is a  
2 polarizing cube.

1                   23. (New) The spectral imaging system of claim 12, wherein said first polarization is  
2 perpendicular to a plane of incidence (s-polarization).

1                   24. (New) The spectral imaging system of claim 12 wherein said second polarization is  
2 parallel to a plane of incidence (p-polarization).

1                   25. (New) The spectral imaging system of claim 12, wherein said at least two turning  
2 mirrors are configured to turn independently.

1                   26. (New) The spectral imaging system of claim 12, wherein said at least two turning  
2 mirrors are coated with a dielectric to minimize effects upon said first polarization and said second  
3 polarization.

### REMARKS

Upon entry of this amendment, which cancels claims 5-11, amends claim 12 and adds claims 23-26, claims 12-13 and 23-26 remain pending.

In response to a restriction requirement dated January 30, 2001, claims 12 and 13 (i.e., Group III) have been elected for continued prosecution in connection with the above-identified application and claims 5-11 have been cancelled. Applicants reserve the right to continue prosecution of claims 5-11 in a divisional application.

Claims 12 and 13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over McNamara (U.S. Patent No. 5,539,517) in view of Cabib (U.S. Patent No. 5,539,517).